

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Margrave, et al. Art Unit : 1793
Serial No. : 09/809,885 Examiner : Stuart L. Hendrickson
Filed : March 16, 2001 Conf. No. : 7715
Title : FUNCTIONALIZED SINGLE-WALL CARBON NANOTUBES

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REQUEST FOR CORRECTED OFFICIAL FILING RECEIPT

Please correct the Filing Receipt for the above-referenced application to correct and update the Title of this application to "Functionalized Single-Wall Carbon Nanotubes" as shown in Applicant's Amendment Under 37 C.F.R. § 1.111 at page 2, attached here to as Exhibit A.

Please supply a Corrected Filing Receipt to the undersigned with respect to this application. A copy of the last issued Filing Receipt showing the desired changes in red ink is attached for your convenience as Exhibit B.

We believe there to be no fee(s) due at this time, however, if we have calculated incorrectly, please apply any charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 21753-0013003.

Respectfully submitted,

Date: _____

3/19/09



Ross Spencer Garsson
Reg. No. 38,150

Fish & Richardson P.C.
One Congress Plaza
Suite 810
111 Congress Avenue
Austin, TX 78701
Telephone: (512) 472-5070
Facsimile: (877) 769-7945

EXHIBIT

A

21753-
0013003



DOCKETED

6/16/03

DOCKET NO: 11324-P0302 CLIENT (Ref): CHEMICAL DERIVATION ATTY/ELC: PCG/82
Inv/Applicant: MARGRAVE TITLE: OF SINGLE WALL CARBON...
ETA: ETA App'l/Grant No: 09/809,885 PTO RECEIPT DATE STAMP: JUN 06 2003

<input type="checkbox"/> New Patent Application	<input checked="" type="checkbox"/> Transmittal Letter	
<input checked="" type="checkbox"/> App'l Data Sheet	<input checked="" type="checkbox"/> Fee Transmittal	
<input type="checkbox"/> Provisional	<input checked="" type="checkbox"/> Check(s) - \$ <u>110.00</u>	
<input type="checkbox"/> Prov Cvr Sheet	<input type="checkbox"/> Issue Fee <input type="checkbox"/> Check - \$	
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<input type="checkbox"/> Computer Readable	<input checked="" type="checkbox"/> FORM <u>PTO/SB/25 - TERMINAL DISCLOSURE</u>	
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<input type="checkbox"/> Declaration	<input checked="" type="checkbox"/> Response/Amendment <u>UNDER 37CFR 31.111</u>	
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<input type="checkbox"/> IDS, PTO/SB/08A-B, # Ref:	DUE: <u>07/13/2003</u> MAILED: <u>06/03/2003</u>	
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AUTHORIZED SIGNATURE

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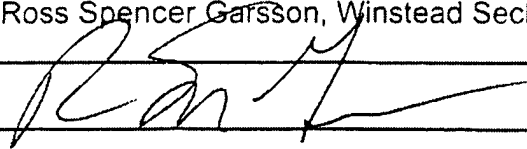
TOTAL \$110.00


002833

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TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i>	Application Number	09/809,885
	Filing Date	03/16/2001
	First Named Inventor	John L. Margrave
	Group Art Unit	1754
	Examiner Name	Stuart L. Hendrickson
Total Number of Pages in This Submission		15
Attorney Docket Number		11321-P013D2

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input checked="" type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): <div style="text-align: center;">Postal Receipt Card</div>
Remarks: _____		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Ross Spencer Garsson, Winstead Sechrest & Minick P.C.
Signature	
Date	06/03/2003

CERTIFICATE OF MAILING			
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date:			
			June 3, 2003
Typed or printed name	Gracie Solis		
Signature		Date	06/03/2003

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FEE TRANSMITTAL
for FY 2003

Effective 01/01/2003, Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$) 110.00**Complete if Known**

Application Number	09/809,885
Filing Date	March 16, 2001
First Named Inventor	John L. Margrave et al.
Examiner Name	Stuart L. Hendrickson
Art Unit	1754
Attorney Docket No.	11321-P013D2

METHOD OF PAYMENT (check all that apply)☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:Deposit
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23-2426

Winstead Sechrest & Minick P.C.

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) during the pendency of this application☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 750	2001 375	Utility filing fee	
1002 330	2002 165	Design filing fee	
1003 520	2003 260	Plant filing fee	
1004 750	2004 375	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1)			(\$) 0.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims		-20** =		X		=	
Independent Claims		-3** =		X		=	
Multiple Dependent						=	

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1202 18	2202 9	Claims in excess of 20	
1201 84	2201 42	Independent claims in excess of 3	
1203 280	2203 140	Multiple dependent claim, if not paid	
1204 84	2204 42	** Reissue independent claims over original patent	
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent	
SUBTOTAL (2)			(\$) 0.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 410	2252 205	Extension for reply within second month	
1253 930	2253 465	Extension for reply within third month	
1254 1,450	2254 725	Extension for reply within fourth month	
1255 1,970	2255 985	Extension for reply within fifth month	
1401 320	2401 160	Notice of Appeal	
1402 320	2402 160	Filing a brief in support of an appeal	
1403 280	2403 140	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,300	2453 650	Petition to revive - unintentional	
1501 1,300	2501 650	Utility issue fee (or reissue)	
1502 470	2502 235	Design issue fee	
1503 630	2503 315	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 750	2809 375	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 750	2810 375	For each additional invention to be examined (37 CFR 1.129(b))	
1801 750	2801 375	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify) **Terminal Disclaimer**

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 110.00**SUBMITTED BY**

Name (Print/Type)	Ross Spencer Garsson	Registration No. (Attorney/Agent)	38.150	Telephone	512.370.2870
Signature		Date	June 3, 2003		

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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TERMINAL DISCLAIMER TO OBVIATE A PROVISIONAL DOUBLE PATENTING REJECTION OVER A PENDING SECOND APPLICATION	Docket Number (Optional) 11321-P013D2
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In re Application of: John L. Margrave, et al.

Application No.: 09/809,885

Filed: March 16, 2001

For: CHEMICAL DERIVATIZATION OF SINGLE WALL CARBON NANOTUBES TO FACILITATE
SOLVATION THEREOF, AND USE OF DERIVATIZED NANOTUBES

The owner*, Rice University of 100 percent interest in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application, which would extend beyond the expiration date of the full statutory term defined in 35 U.S.C. 154 to 156 and 173 as shortened by any terminal disclaimer filed prior to the grant of any patent granted on pending second Application Number 09/810,150, filed on March 16, 2001 of any patent on the pending second application. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and any patent granted on the second application are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

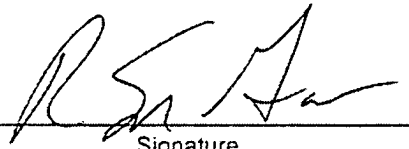
In making the above disclaimer, the owner does not disclaim the terminal part of any patent granted on the instant application that would extend to the expiration date of the full statutory term as defined in 35 U.S.C. 154 to 156 and 173 of any patent granted on the second application, as shortened by any terminal disclaimer filed prior to the patent grant, in the event that any such granted patent: expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321, has all claims canceled by a reexamination certificate, is reissued, or is in any manner terminated prior to the expiration of its full statutory term as shortened by any terminal disclaimer filed prior to its grant.

Check either box 1 or 2 below, if appropriate.

1. ☐ For submissions on behalf of an organization (e.g., corporation, partnership, university, government agency, etc.), the undersigned is empowered to act on behalf of the organization.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

2. ☒ The undersigned is an attorney or agent of record.


Signature

6/3/03
Date

Ross Spencer Garsson

Typed or printed name

- ☒ Terminal disclaimer fee under 37 CFR 1.20(d) is included.

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*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner).
Form PTO/SB/96 may be used for making this statement. See MPEP § 324.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

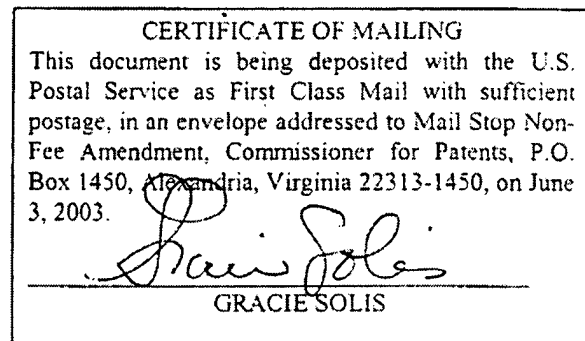
In re Application of:
John L. Margrave et al.

For: CHEMICAL DERIVATIZATION OF
SINGLE WALL CARBON NANOTUBES
TO FACILITATE SOLVATION
THEREOF, AND USE OF DERIVATIZED
NANOTUBES

Atty Dkt: 11321-P013D2
(formerly 11321-P026US)

§ Serial No: 09/809,885
§
§ Filed: March 16, 2001
§
§ Group Art Unit: 1754
§
§ Examiner: Stuart L Hendrickson
§
§
§

Mail Stop Non-Fee Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

AMENDMENT UNDER 37 C.F.R. § 1.111

Dear Sir:

In response to the Office Action having a mailing date of 23 April 2003 (Paper No. 3), with a three-month shortened statutory period for response set to expire on 23 July 2003, please amend the above-identified Application as follows:

IN THE TITLE

Please replace the current title with:

--FUNCTIONALIZED SINGLE-WALL CARBON NANOTUBES--

IN THE CLAIMS

(1) Please amend the claims as follows:

1-18 (Cancelled)

19. (Renumbered Original Claim 52) A single wall carbon nanotube having one or more substituents covalently bonded to a sidewall of the single wall carbon nanotube.

20. (Amended and Renumbered Original Claim 53) The single wall carbon nanotube of claim 19, wherein the substituents are selected from the group consisting of alkyl, acyl, aryl, aralkyl, halogen, substituted thiol, unsubstituted thiol, substituted amino, unsubstituted amino, hydroxy, and OR', wherein R' is selected from the group consisting of hydrogen, alkyl, acyl, aryl, aralkyl, halogen, substituted thiol, unsubstituted thiol, substituted amino, unsubstituted amino, a linear carbon chain, and a cyclic carbon chain.

21. (Amended and Renumbered Original Claim 54) The single wall carbon nanotube of claim 20, wherein the linear carbon chain or the cyclic carbon chain or both is substituted with at least one heteroatom.

22. (Amended and Renumbered Original Claim 55) The single wall carbon nanotube of claim 20, wherein the linear carbon chain or the cyclic carbon chain or both is substituted with one or more of the group consisting of =O, =S, hydroxy, an aminoalkyl, an amino acid, and a peptide of 2-8 amino acids.

23. (Amended and Renumbered Original Claim 56) The single wall carbon nanotube of claim 19, wherein the substituents are alkyl or phenyl.

24. (Amended and Renumbered Original Claim 57) The single wall carbon nanotube of claim 19, further comprising metal complexed to at least one of the substituents.

25. (Twice Amended and Renumbered Original Claim 58) The single wall carbon nanotube of claim 24, wherein the metal is selected from the group consisting of Group VIB ~~VI~~ ~~B~~ metals and Group VIIIB ~~VIII-B~~ metals.

26. (Amended and Renumbered Original Claim 59) The single wall carbon nanotube of claim 19, wherein the amount of substituent bonded to carbon atoms of the single wall carbon nanotube is at a substituent to carbon ratio of from (a) one substituent to about 26 carbon atoms to (b) one substituent to about two carbon atoms.

27. (Amended and Renumbered Original Claim 60) The single wall carbon nanotube of claim 26, wherein the amount of substituent bonded to the carbon atoms of the single wall carbon nanotube is at a substituent to carbon ratio of from (a) one substituent to about ten carbon atoms to (b) one substituent to about two carbon atoms.

28. (Amended and Renumbered Original Claim 61) The single wall carbon nanotube of claim 27, wherein the amount of substituent bonded to the carbon atoms of the single wall carbon nanotube is at the substituent to carbon ratio of from (a) one substituent to about three carbon atoms to (b) one substituent to about two carbon atoms.

29. (Renumbered Original Claim 62) A product made by the process of covalently bonding substituents to carbon atoms on a sidewall of the single wall carbon nanotube.

30. (Amended and Renumbered Original Claim 63) The product of claim 29, wherein the substituents are selected from the group consisting of alkyl, acyl, aryl, aralkyl, halogen, substituted thiol, unsubstituted thiol, substituted amino, unsubstituted amino, hydroxy, and OR', wherein R' is selected from the group consisting of hydrogen, alkyl, acyl, aryl, aralkyl, halogen, substituted thiol, unsubstituted thiol, substituted amino, unsubstituted amino, a linear carbon chain, and a cyclic carbon chain.

31. (Amended and Renumbered Original Claim 64) The product of claim 30, wherein the linear carbon chain or the cyclic carbon chain or both is substituted with at least one heteroatom.

32. (Amended and Renumbered Original Claim 65) The product of claim 30, wherein the linear carbon chain or the cyclic carbon chain or both is substituted with one or more of the group consisting of =O, =S, hydroxy, an aminoalkyl, an amino acid, and a peptide of 2-8 amino acids.

33. (Amended and Renumbered Original Claim 66) The product of claim 29, wherein the substituents are selected from the group consisting of fluorine, alkyl and phenyl.

34. (Amended and Renumbered Original Claim 67) The product of claim 29, further comprising the step of complexing a metal to at least one of the substituents.

35. (Twice Amended and Renumbered Original Claim 68) The product of claim 34, wherein the metal is selected from the group consisting of Group VIB ~~VIB~~ metals and Group VIIIB ~~VIII-B~~ metals.

36. (Amended and Renumbered Original Claim 69) The product of claim 29, wherein the amount of substituent bonded to carbon atoms of the single wall carbon nanotube is at a substituent to carbon ratio of from (a) one substituent to about 26 carbon atoms to (b) one substituent to about two carbon atoms.

37. (Amended and Renumbered Original Claim 70) The product of claim 36, wherein the amount of substituent bonded to the carbon atoms of the single wall carbon nanotube is at the substituent to carbon ratio of from (a) one substituent to about ten carbon atoms to (b) one substituent to about two carbon atoms.

38. (Amended and Renumbered Original Claim 71) The product of claim 37, wherein the amount of substituent bonded to the carbon atoms of the single wall carbon nanotube is at the substituent to carbon ratio of from (a) one substituent to about three carbon atoms to (b) one substituent to about two carbon atoms.

39. (Amended and Renumbered Original Claim 72) A product made by the process comprising:

- (a) fluorinating a single wall carbon nanotube; and
- (b) reacting the fluorinated single wall carbon nanotube with a compound containing a substituent to covalently bond the substituents to the single wall carbon nanotube.

40. (Amended and Renumbered Original Claim 73) The product of claim 39, wherein the substituents are selected from the group consisting of alkyl, acyl, aryl, aralkyl, halogen, substituted thiol, unsubstituted thiol, substituted amino, unsubstituted amino, hydroxy, and OR', a linear carbon chain, a cyclic carbon chain, and peptide, wherein R' is selected from the group consisting of hydrogen, alkyl, acyl, aryl, aralkyl, halogen, substituted thiol, unsubstituted thiol, substituted amino, unsubstituted amino, a linear carbon chain, and a cyclic carbon chain.

41. (Amended and Renumbered Original Claim 74) The product of claim 40, wherein the linear carbon chain or the cyclic carbon chain or both is substituted with at least one heteroatom.

42. (Amended and Renumbered Original Claim 75) The product of claim 40, wherein the linear carbon chain or the cyclic carbon chain or both is substituted with one or more of the group consisting of =O, =S, hydroxy, an aminoalkyl, an amino acid, and a peptide of 2-8 amino acids.

43. (Amended and Renumbered Original Claim 76) The product of claim 39, wherein the substituents are alkyl or phenyl.

44. (Amended and Renumbered Original Claim 77) The product of claim 39 made by the process further comprising the step of complexing a metal to at least one of the substituents.

45. (Twice Amended and Renumbered Original Claim 78) The product of claim 44, wherein the metal is selected from the group consisting of Group VIB ~~VI-B~~ metals and Group VIIIB ~~VIII-B~~ metals.

46. (Amended and Renumbered Original Claim 79) The product of claim 39, wherein the amount of substituent bonded to carbon atoms of the single wall carbon nanotube is at a substituent to carbon ratio of from (a) one substituent to about 26 carbon atoms to (b) one substituent to about two carbon atoms.

47. (Amended and Renumbered Original Claim 80) The product of claim 46, wherein the amount of substituent bonded to the carbon atoms of the single wall carbon nanotube is at the substituent to carbon ratio of from (a) one substituent to about ten carbon atoms to (b) one substituent to about two carbon atoms.

48. (Amended and Renumbered Original Claim 81) The product of claim 47, wherein the amount of substituent bonded to the carbon atoms of the single wall carbon nanotube is at the substituent to carbon ratio of from (a) one substituent to about three carbon atoms to (b) one substituent to about two carbon atoms.

49. (Amended and Renumbered Original Claim 82) The product of claim 39, wherein said step of fluorinating the single wall carbon nanotube comprises exposing the single wall carbon nanotube to a fluorinating agent.

50. (Twice Amended and Renumbered Original Claim 83) The product of claim 49, wherein the fluorinating agent is selected from the group consisting of fluorine, ClF₃, BrF₃, IF₃, XeF₂, XeF₄, AgF₂, and MnF₃.

51. (Amended and Renumbered Original Claim 84) The product of claim 49, wherein the fluorinating step occurs at a reaction temperature up to about 500°C.

52. (Amended and Renumbered Original Claim 85) The product of claim 49, wherein the reaction temperature is between about 250°C and about 400°C.

53. (Amended and Renumbered Original Claim 86) A derivatized single wall carbon nanotube made by the process comprising the steps of:

- (a) reacting the single wall carbon nanotube with a fluorinating agent;
- (b) solvating the single wall carbon nanotube ~~from step (i)~~; and
- (c) reacting the fluorinated single wall carbon nanotube with a compound containing a substituent to covalently bond the substituent to the single wall carbon nanotube.

54. (Amended and Renumbered Original Claim 87) The derivatized single wall carbon nanotube of claim 53, wherein the substituents are selected from the group consisting of alkyl, acyl, aryl, aralkyl, halogen, substituted thiol, unsubstituted thiol, substituted amino, unsubstituted amino, hydroxy, and OR', wherein R' is selected from the group consisting of hydrogen, alkyl, acyl, aryl, aralkyl, halogen, substituted thiol, unsubstituted thiol, substituted amino, unsubstituted amino, a linear carbon chain, and a cyclic carbon chain.

55. (Amended and Renumbered Original Claim 88) The derivatized single wall carbon nanotube of claim 54, wherein the linear carbon chain or the cyclic carbon chain or both is substituted with at least one heteroatom.

56. (Amended and Renumbered Original Claim 89) The derivatized single wall carbon nanotube of claim 54, wherein the linear carbon chain or the cyclic carbon chain or both is substituted with one or more of the group consisting of =O, =S, hydroxy, an aminoalkyl, an amino acid, and a peptide of 2-8 amino acids.

57. (Amended and Renumbered Original Claim 90) The derivatized single wall carbon nanotube of claim 53, wherein the fluorinating agent is selected from the group consisting of fluorine, ClF₃, BrF₃, IF₅, XeF₂, XeF₄, AgF₂, and MnF₃.

58. (Amended and Renumbered Original Claim 91) The derivatized single wall carbon nanotube of claim 53, wherein the solvation step comprises sonication.

59. (Amended and Renumbered Original Claim 92) The derivatized single wall carbon nanotube of claim 53, wherein the solvation step comprises using a solvent selected from the group consisting of an alcohol, CHCl_3 , and dimethylformamide.

60. (Amended and Renumbered Original Claim 93) The derivatized single wall carbon nanotubes of claim 59, wherein the alcohol is selected from the group consisting of methanol, ethanol, 2,2,2-trifluoroethanol, 2-propanol, 2-butanol, n-pentanol, n-hexanol, cyclohexanol and n-heptanol.

61. (Amended and Renumbered Original Claim 94) The derivatized single wall carbon nanotube of claim 53, wherein the amount of substituent bonded to carbon atoms of the single wall carbon nanotube is at a substituent to carbon ratio of from (a) one substituent to about 26 carbon atoms to (b) one substituent to about two carbon atoms.

62. (Amended and Renumbered Original Claim 95) The derivatized single wall carbon nanotube of claim 61, wherein the amount of substituent bonded to the carbon atoms of the single wall carbon nanotube is at a substituent to carbon ratio of from (a) one substituent to about ten carbon atoms to (b) one substituent to about two carbon atoms.

63. (Amended and Renumbered Original Claim 96) The derivatized single wall carbon nanotube of claim 62, wherein the amount of substituent bonded to the carbon atoms of the single wall carbon nanotube is at the substituent to carbon ratio of from (a) one substituent to about three carbon atoms to (b) one substituent to about two carbon atoms.

REMARKS

Claims 52-96 are pending in the Application.

Claims 52-96 stand rejected.

Claims 52-96 have been renumbered as Claims 19-63.

I. RENUMBERING OF CLAIMS

In Paper No. 3, Examiner has indicated that Claims should be renumbered beginning at Claim 19. This is consistent with a telephone communication received by Applicant's counsel from Examiner regarding this a several other of Applicant's patent applications that, like the present Application, are divisional applications of United States Patent Application Serial No. 09/787,473 ("the parent '473 patent application").

On or about April 11, 2003, Applicant amended the Claims to begin numbering the claims at Claim 19. See Supplemental Preliminary Amendment To Revise Claim Numbering, filed April 11, 2003. As shown above, the amended claims reflect this revised claim numbering. The Claims have also been amended to correct minor typographical errors in the Claims.

To avoid any confusion, Applicant will hereinafter refer to the claims under the revised claim numbers (*i.e.*, Claims 19-63, respectively).

II. PROVISIONAL OBVIOUSNESS-TYPE DOUBLE PATENTING REJECTIONS

In Paper No. 3, the Examiner has provisionally rejected the claims under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the ~~claims~~ of copending United States Patent Application Serial No. 09/810,150. Applicant traverses these rejections. However, to facilitate prosecution of the Application, Applicant hereby responds with the enclosed Terminal Disclaimer to moot these provisional rejections.

III. REJECTIONS UNDER 35 U.S.C. §§ 102(e) AND 103(a) OVER HADDON

The Examiner has rejected Claims 19-63 (formerly claims 52-96) under 35 U.S.C. § 102(e) as being anticipated by United States Patent No. 6,331,262 B1 to *Haddon et al.*

("Haddon"). Paper No. 3, at 3. In the alternative, the Examiner has rejected Claims 19-63 (formerly claims 52-96) under 35 U.S.C. § 103(a) as obvious over *Haddon*.

Applicant respectfully traverses these rejections. *Haddon* is not prior art for the claims of the present Application; thus, these rejections are improper and must be withdrawn.

As noted above, the present Application is a divisional application of the parent '473 patent application. The parent '473 patent application is the 35 U.S.C. § 371 national application of International Application Number PCT/US 99/21366, filed September 17, 1999. Filing Receipt, at 1. Accordingly, the parent '473 patent application has a filing date of September 17, 1999. M.P.E.P. § 1893.03(b). As the present Application is a divisional of the parent '473 patent application and the requirements of 35 U.S.C. § 120 have been satisfied, the effective filing date is at least the date of the filing of the parent '473 patent application. M.P.E.P. § 702. Thus, the effective filing date of the present Application is, at least, September 17, 1999. *Id.*

The patent application from which *Haddon* issued (United States Patent Application Serial No. 09/401,668, the "*Haddon* '668 application")) has a filing date of September 22, 1999. *See Haddon*, cover page. *Haddon* claims priority to Provisional United States Patent Application Serial Numbers 60/102,909 and 60/102,787, both filed on October 2, 1998 (collectively the "*Haddon* provisional applications"). *Id.*

As an initial matter, the *Haddon* '668 application was filed after the filing of the Applicant's parent '473 patent application. Thus, to the extent the *Haddon* '668 application adds new matter to the *Haddon* provisional applications, such new matter is not prior art to the present application. *See* M.P.E.P. § 2136.03(IV).

Putting the new matter issue aside, the *Haddon* '668 application and the *Haddon* provisional applications are further not prior art for the present Application because the present Application claims priority benefits to the following provisional applications:

- (1) Provisional United States Patent Application Serial Number 60/138,505, filed on June 10, 1999;
- (2) Provisional United States Patent Application Serial Number 60/106,918, filed on November 3, 1998; and

(3) Provisional United States Patent Application Serial Number 60/101,092, filed on September 18, 1998 ("the '092 provisional application").

All of the pending independent claims and at least some, if not all, of the pending dependent claims in the present Application are fully supported by the '092 provisional application; thus, such supported pending claims have an effective filing date of September 18, 1998. See M.P.E.P. § 706.02. This effective filing date is before the filing dates of the *Haddon* '668 application and the *Haddon* provisional applications. Consequently, the *Haddon* '668 application and the *Haddon* provisional applications cannot be prior art to such claims under 35 U.S.C. § 102(e).

Applicant understands the Examiner may assert one or more of the dependent claims of the present Application are not fully supported by the '092 provisional application because, in Examiner's view, each of those dependent claims includes a feature not disclosed in the '092 provisional application. To the extent such assertions can be made, Applicant notes that any such allegedly missing features of the dependent claims would likewise not be found in the *Haddon* '668 application and the *Haddon* provisional applications. Under such circumstance, the *Haddon* '668 application and the *Haddon* provisional applications would again not be prior art. See M.P.E.P. § 715.02.

In view of the foregoing, Applicant respectfully requests the Examiner withdraw the rejection of Claims 19-63 under 35 U.S.C. § 102(e) as being anticipated by *Haddon*, or, alternatively, under 35 U.S.C. § 103(a) as being obvious under *Haddon*.

CONCLUSION

As a result of the foregoing, it is asserted by Applicant that the remaining Claims in the Application are in condition for allowance, and respectfully request an early allowance of such Claims.

Applicant respectfully requests that the Examiner call Applicant's attorney at the below listed number if the Examiner believes that such a discussion would be helpful in resolving any remaining problems.

RESPECTFULLY SUBMITTED,

WINSTEAD SECHREST & MINICK P.C.

Attorneys for Applicant

By: 

Ross Spencer Garsson
Reg. No. 38,150
P.O. Box 1450
1201 Main Street
Dallas, Texas 75250-0784
(512) 370-2870

EXHIBIT

B



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APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY DOCKET NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/809,885	03/16/2001	1754	620	11321- P026US	26	45	4

Attention: Ross Spencer Garsson
Winstead Sechrest & Minick P.C.
Suite 800
100 Congress Avenue
Austin, TX 78701

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P01302

CONFIRMATION NO. 7715

CORRECTED FILING RECEIPT



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Date Mailed: 05/29/2003

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Applicant(s)

John L. Margrave, Bellaire, TX;
Edward T. Mickelson, Pearland, TX;
Robert Hague, Houston, TX;
Peter Boul, Houston, TX;
Chad Huffman, Houston, TX;
Jie Liu, Chapel Hill, NC;
Richard E. Smalley, Houston, TX;
Ken Smith, Katy, TX;
Daniel T. Colbert, Houston, TX;

Domestic Priority data as claimed by applicant

This application is a DIV of 09/787,473 03/16/2001
which is a 371 of PCT/US99/21366 09/17/1999
which claims benefit of 60/101,092 09/18/1998
and claims benefit of 60/106,918 11/03/1998
and claims benefit of 60/138,505 06/10/1999

Foreign Applications

UNITED STATES OF AMERICA PCT/US99/21366 09/17/1999

If Required, Foreign Filing License Granted: 05/29/2003

Projected Publication Date: Not Applicable

Non-Publication Request: No

Early Publication Request: No

**** SMALL ENTITY ****

Title

~~Chemical derivatization of single-wall carbon nanotubes to facilitate solvation thereof, and use of derivatized nanotubes to form catalyst-containing seed materials for use in making carbon fibers~~
 Functionalized Single-Wall Carbon Nanotubes

Preliminary Class

423

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